

Aeroelastic Benchmark Experiments, Phase I

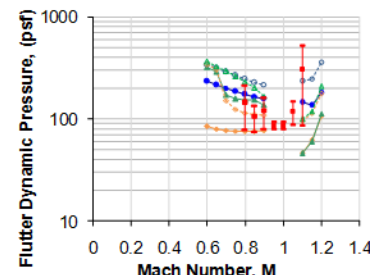
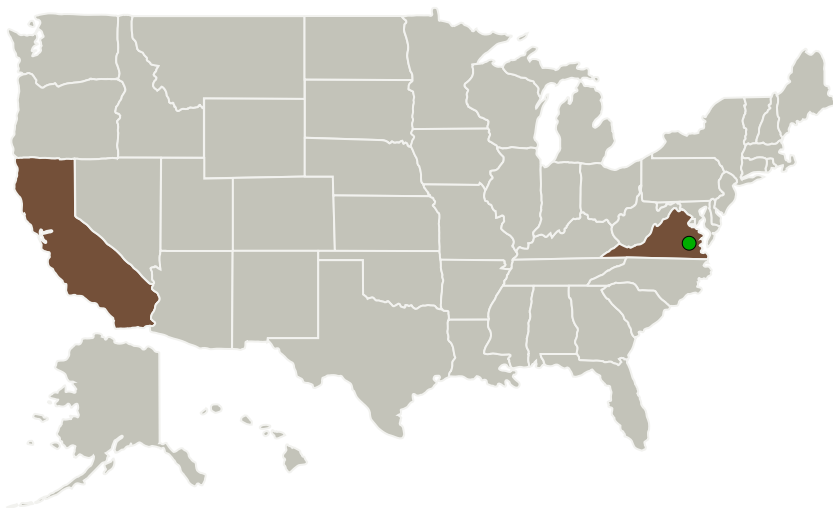
Completed Technology Project (2014 - 2014)



Project Introduction

M4 Engineering proposes to conduct canonical aeroelastic benchmark experiments. These experiments will augment existing sources for aeroelastic data in the transonic regime. Models will be constructed with well characterized engineering materials and will include measurement of high frequency pressure data. A variety of transonic conditions will be tested to provide opportunities for validation of aeroelastic response of transonic flows not previously available.

Primary U.S. Work Locations and Key Partners



Aeroelastic Benchmark
Experiments Project Image

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Organizations Performing Work	Role	Type	Location
M4 Engineering, Inc.	Lead Organization	Industry Women-Owned Small Business (WOSB)	Long Beach, California
● Langley Research Center(LaRC)	Supporting Organization	NASA Center	Hampton, Virginia

Primary U.S. Work Locations

California	Virginia
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Project Transitions

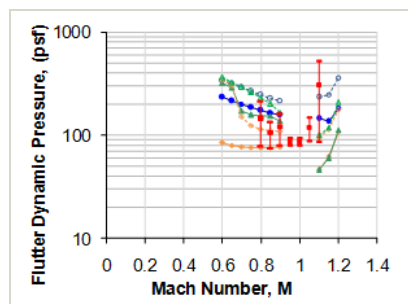
June 2014: Project Start

December 2014: Closed out

Closeout Documentation:

- Final Summary Chart(<https://techport.nasa.gov/file/137511>)

Images



Project Image

Aeroelastic Benchmark Experiments
Project Image
(<https://techport.nasa.gov/image/131827>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

M4 Engineering, Inc.

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

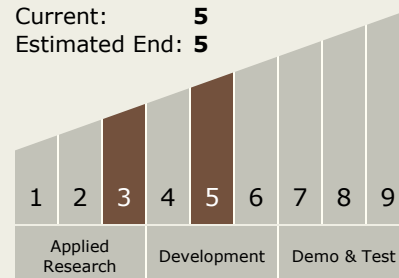
Carlos Torrez

Principal Investigator:

Kevin Roughen

Technology Maturity (TRL)

Start: **3**
Current: **5**
Estimated End: **5**



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Technology Areas

Primary:

- TX11 Software, Modeling, Simulation, and Information Processing
 - └ TX11.2 Modeling
 - └ TX11.2.1 Software Modeling and Model Checking

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System